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REMARKS

This Request for Reconsideration is being filed in response to the Final Office Action dated September 16, 2004. For the following reasons, this application should be considered in condition for allowance and the case passed to issue.

The indication of allowability of claims 2-7 is gratefully acknowledged. However, in light of the arguments presented below regarding the patentability of claims 1 and 8, these claims have not been rewritten into independent form at this time.

Claims 1 and 8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Shimasaki et al. in view of Yamaguchi et al. This rejection is hereby traversed and reconsideration and withdrawal are therefore respectfully requested. The following is a comparison of the present invention as claimed with the combination of Shimasaki and Yamaguchi references.

The patent, as described in claim 1, provides an engine idle stop control system for a vehicle that has an engine, a motor/generator connected to the engine, an automatic transmission which transmits the rotation of the engine to a drive wheel, and a sensor which detects a vehicle stationary state. The control system also includes a sensor which detects an accelerator pedal depression amount in a microprocessor. This microprocessor is programmed to stop the engine according to conditions when the vehicle has been stationary, and restart the engine by starting the motor/generator when a request to restart the engine which has stopped is determined. The microprocessor controls absorption of torque by the motor/generator so that a starting torque according to the accelerator pedal depression after restart is effectively the same torque for vehicle starting from the engine stop state as for vehicle starting from an engine idle rotation state. It is respectfully submitted that proper consideration has not been made of the limitations

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recited in claims 1 and 8. In particular, the combination of references fails to disclose the controlling of the absorption of torque by the motor/generator so that starting torque according to the accelerator pedal depression after restart is effectively the same torque for vehicle starting from the engine stop state as for vehicle starting from an engine idle rotation state. There is no disclosure or suggestion in either reference for such a feature, either alone or in combination.

The invention compensates for the torque difference at vehicle starting from these two states (i.e. the engine stop state the engine idle rotation state) by use of a motor/generator. In other words, the motor/generator functions as a generator to absorb a torque when the vehicle starts to run from the engine stopped state. However, the motor/generator does not absorb a torque when it starts to run from the engine idling state. In this manner, both starting torques become equal.

Shimasaki discloses an engine starting from either a stopped state or from an idling state when a vehicle starts to run. In this reference, a starting torque of the engine from the engine stopped state is *different* from the torque of the engine from the engine idling state. However, there is no description in Shimasaki as how to compensate for this torque difference when the vehicle starts to run.

The Examiner relies on Yamaguchi et al. to show canceling of torque fluctuations. However, the canceling of torque fluctuations is much different than that claimed, so that the combination of Shimasaki and Yamaguchi, even if possible, would fail to disclose the present invention. In particular, Yamaguchi describes that when a vehicle starts, the drive motor 4 drives the vehicle and when the vehicle speed reaches a certain speed, a motor/generator 3 starts an engine. When this engine starts, a torque generated by the engine would suddenly be added to a driving torque of the drive motor 4, which appears as a shock to the vehicle driving force. To

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cancel this shock, the drive motor 4 reduces the output torque of the motor at engine start.

Hence, the absorbing torque by the drive motor 4 is equal to the engine torque generated, so that a drive torque of the vehicle does not change at all before and after the engine starting.

The teachings of Yamaguchi cannot be ignored, and must be considered in their entirety. Combining Yamaguchi with Shimasaki, the motor/generator would absorb the engine torque completely so that the vehicle would not actually be able to start since no starting torque would remain. In Shimasaki, when the vehicle starts to run, starting torque is generated only by the engine so that *the combination proposed by the Examiner would prevent running since the motor/generator would absorb the engine torque completely*. By contrast, the present invention does not absorb all of the starting torque itself, as in the manner suggested by Yamaguchi.

In other words, Yamaguchi teaches that when the engine starts while the vehicle is running by the motor, the engine torque is suddenly added to motor torque as a vehicle driving torque, causing a torque shock to the vehicle. Yamaguchi teaches absorbing such torque shock by the motor reducing a torque which is equal to the engine torque generated so that the total vehicle driving torque is kept unchanged. Taking these teachings into account, it is clear that Yamaguchi does not show or suggest a working embodiment when combined with the teachings of Shimasaki. Simply put, the combination would not work in the manner intended or in the manner claimed by the present invention.

In the invention, the motor/generator only absorbs the starting torque difference between engine starting from the stop state and the idling state. The engine starting torque from the stop state and idling state is different, as described above, so that the motor/generator absorbs the engine torque corresponding to the starting torque difference only when the engine starts from engine stop state. In other words, the motor/generator does not absorb engine torque at all when

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the engine starts from the idling state. By contrast, in Yamaguchi et al. (as well as the combination of Yamaguchi and Shimasaki), the motor always absorbs the engine torque to keep the same vehicle driving torque when the engine starts.

Claim 1 and claim 8 both point out these differences. Claim 1, for example, recites that the microprocessor is programmed to control absorption of torque by the motor/generator so that the starting torque according to the accelerator pedal depression after restart is effectively the same torque for vehicle starting from the engine stop state as for vehicle starting from an engine idle rotation state. The Examiner has not provided a *prima facie* case that the combination of Shimasaki and Yamaguchi shows a controlled absorption of torque so that the starting torque is effectively the same torque for a vehicle start from the two different states. Instead, Yamaguchi merely shows the absorption of torque when the engine starts while the vehicle is running by a motor to prevent a torque shock to the vehicle. There is no reason to think that the torque is the same for the vehicle starting from the engine stop state as for a vehicle starting from an engine idle rotation state.

The Examiner has attempted to place the burden on the Applicants for showing that the cancellation of torque does not inherently provide the same effective torque for vehicle starting from an engine stop state as from an engine idling state. (See page 3, last paragraph of the Office Action). However, the burden is not initially on Applicants to prove non-inherency, but rather on the Examiner to demonstrate why a cancellation of torque inherently provides the same effective torque for vehicle starting from an engine stop state as from an engine idling state. The Examiner persists in the unsupported statement that the cancellation of torque inherently provides the same effective torque for vehicle starting from both states. From what factual evidence is this conclusion based? No supporting journals, no factual evidence of any kind has

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been provided to show that the conclusion of inherency is proper. Therefore, the Examiner's conclusions are not supported in fact or in law.

For the above reasons, the rejection of claims 1 and 8 should be reconsidered and withdrawn and such action is respectfully solicited. In light of the remarks above, this application should therefore be considered in condition for allowance and the case passed to issue. If there are any questions regarding this Amendment or the application in general, a telephone call to the undersigned would be appreciated to expedite the prosecution of the application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 502624 and please credit any excess fees to such deposit account.

Respectfully submitted,

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